

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the current application:

Listing of the claims:

Claim 1 - Claim 86 (Canceled)

Claim 87 (New) A method for protecting decrypted digital data from illegitimate use, said decrypted digital data being decrypted from encrypted digital data, said method comprising:

encrypting said decrypted digital data using a changeable key to produce changeable key re-encrypted digital data;

encrypting said changeable key re-encrypted digital data using an unchangeable key-to produce changeable-unchangeable keys double re-encrypted digital data to be stored, copied or transferred;

decrypting said copied, stored or transferred changeable-unchangeable keys double re-encrypted digital data using said unchangeable key to said changeable key re-encrypted digital data; and

decrypting said changeable key re-encrypted digital data using said changeable key to said decrypted digital data.

Claim 88 (New) The method of claim 87 wherein said unchangeable key may be in a device.

Claim 89 (New) A method for protecting decrypted digital data from illegitimate use, said decrypted digital data being decrypted from encrypted digital data, comprising:

encrypting said decrypted digital data using an unchangeable key to produce unchangeable key re-encrypted digital data;

encrypting said unchangeable key re-encrypted digital data using a changeable key to produce unchangeable-changeable key double re-encrypted digital data to be stored, copied or transferred;

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decrypting said copied, stored or transferred unchangeable-changeable keys double re-encrypted digital data using said changeable key to said unchangeable key re-encrypted digital data; and

decrypting said unchangeable key re-encrypted digital data using said unchangeable key to said decrypted digital data.

Claim 90 (New) The method of claim 89 wherein said unchangeable key may be in a device.

Claim 91 (New) The method according to claim 87 or 89, wherein said encrypting and decrypting using said changeable key are carried out by a software.

Claim 92 (New) The method according to claim 87 or 89, wherein said encrypting and decrypting using said changeable key are carried out by a hardware.

Claim 93 (New) The method according to claim 88 or 90, wherein said changeable key is supplied externally from said device.

Claim 94 (New) The method according to claim 88 or 90, wherein said changeable key is generated in said device.

Claim 95 (New) The method according to claim 88 or 90, wherein said encrypting and decrypting using said unchangeable key are carried out by a software.

Claim 96 (New) The method according to claim 87 or 89, wherein said encrypting and decrypting using said unchangeable key are carried out by a hardware.

Claim 97 (New) The method according to claim 88 or 90, wherein said unchangeable key is already placed in said device.

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Claim 98 (New) The method according to claim 88 or 90, wherein said unchangeable key is generated in said device.

Claim 99 (New) The method according to claim 88 or 90, wherein said unchangeable key is supplied externally from said device.

Claim 100 (New) The method according to claim 88 or 90, wherein said unchangeable key is specific to said device.

Claim 101 (New) The method according to claim 88 or 90 wherein said unchangeable key is not specific to said device.

Claim 102 (New) An apparatus for protecting decrypted digital data from illegitimate use, said decrypted digital data being decrypted from encrypted digital data, said apparatus comprising:

- a changeable key encryption unit for encrypting said decrypted digital data using a changeable key to produce changeable key re-encrypted digital data;

- an unchangeable key encryption unit for encrypting said changeable key re-encrypted digital data using an unchangeable key to produce changeable-unchangeable keys double re-encrypted digital data to be stored, copied or transferred;

- an unchangeable key decryption unit for decrypting said copied, stored or transferred changeable-unchangeable keys double re-encrypted digital data using said unchangeable key to said changeable key re-encrypted digital data; and

- a changeable key decryption unit for decrypting said changeable key re-encrypted digital data using said changeable key to said decrypted digital data.

Claim 103 (New) The apparatus of claim 102 wherein said unchangeable key may be in a device.

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Claim 104 (New) An apparatus for protecting decrypted digital data from illegitimate use, said decrypted digital data being decrypted from encrypted digital data, said apparatus comprising:

an unchangeable key encryption unit for encrypting said decrypted digital data using an unchangeable key to produce unchangeable key re-encrypted digital data;

a changeable key encryption unit for encrypting said unchangeable key re-encrypted digital data using a changeable key to produce changeable-unchangeable keys double re-encrypted digital data to be stored, copied or transferred;

a changeable key decryption unit for decrypting said copied, stored or transferred changeable-unchangeable keys double re-encrypted digital data using said changeable key to said unchangeable key re-encrypted digital data; and

an unchangeable key decryption unit for decrypting said unchangeable key re-encrypted digital data using said unchangeable key to said decrypted digital data.

Claim 105 (New) The apparatus of claim 104 wherein said unchangeable key may be in a device.

Claim 106 (New) The apparatus according to claim 102 or 104, in which encrypting and decrypting using said changeable key are carried out by a software.

Claim 107 (New) The apparatus according to claim 102 or 104, in which encrypting and decrypting using said changeable key are carried out by a hardware.

Claim 108 (New) The apparatus according to claim 103 or 105, wherein said changeable key is supplied externally from said device.

Claim 109 (New) The apparatus according to claim 103 or 105, wherein said changeable key is generated in said device.

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Claim 110 (New) The apparatus according to claim 102 or 104, in which encrypting and decrypting using said unchangeable key are carried out by a software.

Claim 111 (New) The apparatus according to claim 102 or 104, in which encrypting and decrypting using said unchangeable key are carried out by a hardware.

Claim 112 (New) The apparatus according to claim 103 or 105, wherein said unchangeable key is already placed in said device.

Claim 113 (New) The apparatus according to claim 103 or 105, wherein said unchangeable key is generated in said device.

Claim 114 (New) The apparatus according to claim 103 or 105, wherein said unchangeable key is supplied externally from said device.

Claim 115 (New) The apparatus according to claim 103 or 105, wherein said unchangeable key is specific to said device.

Claim 116 (New) The apparatus according to claim 103 or 105, wherein said unchangeable key is not specific to said device.

Claim 117 (New) A method for protecting decrypted digital data from illegitimate use, said decrypted digital data being decrypted from digital data encrypted using a first changeable key, said method comprising:

encrypting said decrypted digital data using a second changeable key to produce second changeable key re-encrypted digital data;

encrypting said second changeable key re-encrypted digital data using an unchangeable key to produce unchangeable second changeable keys double re-encrypted digital data to be stored;

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decrypting said stored unchangeable-second changeable keys double re-encrypted digital data using said unchangeable key to said second changeable key re-encrypted digital data;

encrypting said second changeable key re-encrypted digital data using a third changeable key to produce third changeable-second changeable keys double re-encrypted digital data to be copied or transferred;

decrypting said copied or transferred third changeable-second changeable keys double re-encrypted digital data using said third changeable key to said second changeable key re-encrypted digital data; and

decrypting said second changeable key re-encrypted digital data using said second changeable key to said decrypted digital data.

Claim 118 (New) The method of claim 117 wherein said unchangeable key may be in a device.

Claim 119 (New) A method for protecting decrypted digital data from illegitimate use, said decrypted digital data being decrypted from digital data encrypted using a first changeable key, said method comprising:

encrypting said decrypted digital data using an unchangeable key to produce unchangeable key re-encrypted digital data, and encrypting said unchangeable key re-encrypted digital data using a second changeable key to produce second changeable-unchangeable keys double re-encrypted digital data to be stored;

decrypting said stored second changeable-unchangeable keys double re-encrypted digital data using said second changeable key to said unchangeable key re-encrypted digital data;

decrypting said unchangeable key re-encrypted digital data using said unchangeable key to said decrypted digital data;

encrypting said decrypted digital data using a third changeable key to produce third changeable key re-encrypted digital data, and encrypting said third changeable key re-encrypted digital data using said second changeable key to produce second changeable-third changeable keys double re-encrypted digital data to be copied or transferred;

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decrypting said copied or transferred second changeable-third changeable keys double re-encrypted digital data using said second changeable key to said third changeable key re-encrypted digital data; and

decrypting said third changeable key re-encrypted digital data using said third changeable key to said decrypted digital data.

Claim 120 (New) The method of claim 119 wherein said unchangeable key may be in a device.

Claim 121 (New) The method according to claim 117 or 119 wherein said encrypting and decrypting using said second changeable key are carried out by a software.

Claim 122 (New) The method according to claim 117 or 119 wherein said encrypting and decrypting using said second changeable key are carried out by a hardware.

Claim 123 (New) The method according to claim 118 or 120 wherein said second changeable key is supplied externally from said device.

Claim 124 (New) The method according to claim 118 or 120 wherein said second changeable key is generated in said device.

Claim 125 (New) The method according to claim 117 or 119 wherein said encrypting and decrypting using said third changeable key are carried out by a software.

Claim 126. (New) The method according to claim 117 or 119 wherein said-encrypting and decrypting using said third changeable key are carried out by a hardware.

Claim 127 (New) The method according to claim 118 or 120 wherein said third changeable key is supplied externally from said device.

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Claim 128 (New) The method according to claim 118 or 120 wherein said third changeable key is generated in said device.

Claim 129 (New) The method according to claim 117 or 119 wherein said encrypting and decrypting using said unchangeable key are carried out by a software.

Claim 130 (New) The method according to claim 117 or 119 wherein said encrypting and decrypting using said unchangeable key are carried out by a hardware.

Claim 131 (New) The method according to claim 118 or 120 wherein said unchangeable key is already placed in said device.

Claim 132 (New) The method according to claim 118 or 120 wherein said unchangeable key is generated in said device.

Claim 133 (New) The method according to claim 118 or 120 wherein said unchangeable key is supplied externally from said device.

Claim 134 (New) The method according to claim 118 or 120 wherein said unchangeable key is specific to said device.

Claim 135 (New) The method according to claim 118 or 120 wherein said unchangeable key is not specific to said device.

Claim 136 (New) An apparatus for protecting decrypted digital data from illegitimate use, said decrypted digital data being decrypted from digital data encrypted using a first changeable key, said apparatus comprising:

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a second changeable key encryption unit for encrypting said decrypted digital data using a second changeable key to produce second changeable key re-encrypted digital data;

an unchangeable key encryption unit for encrypting said second changeable key re-encrypted digital data using an unchangeable key to produce unchangeable-second changeable keys double re-encrypted digital data to be stored;

an unchangeable key decryption unit for decrypting said stored unchangeable-second changeable keys double re-encrypted digital data using said unchangeable key to said second changeable key re-encrypted digital data;

a third changeable key encryption unit for encrypting said second changeable key re-encrypted digital data using a third changeable key to produce third changeable-second changeable keys double re-encrypted digital data to be copied or transferred;

a third changeable key decryption unit for decrypting said copied or transferred changeable-second changeable keys double re-encrypted digital data using said third changeable key to said second changeable key re-encrypted digital data; and

a second changeable key decryption unit for decrypting said second changeable key re-encrypted digital data using said second changeable key to decrypted digital data.

Claim 137 (New) The apparatus of claim 136 wherein said unchangeable key may be in a device.

Claim 138 (New) An apparatus for protecting decrypted digital data from illegitimate use, said decrypted digital data being decrypted from digital data encrypted using a first changeable key, said apparatus comprising:

an unchangeable key encryption unit for encrypting said decrypted digital data using an unchangeable key to produce unchangeable key re-encrypted digital data, and a second changeable key encryption unit for encrypting said unchangeable key re-encrypted digital data using a second changeable key to produce second changeable-unchangeable key double re-encrypted digital data to be stored;

a second changeable key decryption unit for decrypting said stored second changeable-
unchangeable keys double re-encrypted digital data using said second changeable key to
unchangeable key re-encrypted digital data, and an unchangeable key decryption unit for decrypting
said unchangeable key re-encrypted digital data using said unchangeable key to decrypted digital data;

a third changeable key encryption unit for encrypting said decrypted digital data using a third
changeable key to produce third changeable key re-encrypted digital data, and a second changeable
key encryption unit for encrypting said third changeable key re-encrypted digital data using said second
changeable key to produce second changeable-third changeable keys double re-encrypted digital data
to be copied or transferred; and a second changeable key decryption unit for decrypting said copied or
transferred second changeable-third changeable keys double re-encrypted digital data using said
second changeable key to said third changeable key re-encrypted digital data, and a third changeable
key decryption unit for decrypting said third changeable key re-encrypted digital data using said third
changeable key to decrypted digital data.

Claim 139 (New) The apparatus of claim 138 wherein said unchangeable key may be in a device.

Claim 140 (New) The apparatus according to claim 136 or 138 wherein said encrypting and decrypting
using said second changeable key are carried out by a software.

Claim 141 (New) The apparatus according to claim 136 or 138 wherein said encrypting and decrypting
using said second changeable key are carried out by a hardware.

Claim 142 (New) The apparatus according to claim 137 or 139 wherein said second changeable key is
supplied externally from said device.

Claim 143 (New) The apparatus according to claim 137 or 139 wherein said second changeable key is
generated in said device.

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Claim 144 (New) The apparatus according to claim 137 or 139 wherein said encrypting and decrypting using said third changeable key are carried out by a software.

Claim 145 (New) The apparatus according to claim 136 or 138 wherein said encrypting and decrypting using said third changeable key are carried out by a hardware.

Claim 146 (New) The apparatus according to claim 137 or 139 wherein said third changeable key is supplied externally from said device.

Claim 147 (New) The apparatus according to claim 137 or 139 wherein said third changeable key is generated in said device.

Claim 148 (New) The apparatus according to claim 136 or 138 wherein said encrypting and decrypting using said unchangeable key are carried out by a software.

Claim 149 (New) The apparatus according to claim 136 or 138 wherein said encrypting and decrypting using said unchangeable key are carried out by a hardware.

Claim 150 (New) The apparatus according to claim 137 or 139 wherein said unchangeable key is already placed in said device.

Claim 151 (New) The apparatus according to claim 137 or 139 wherein said unchangeable key is generated in said device.

Claim 152 (New) The apparatus according to claim 137 or 139 wherein said unchangeable key is supplied externally from said device.

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Claim 153 (New) The apparatus according to claim 137 or 139 wherein said unchangeable key is specific to said device.

Claim 154 (New) The apparatus according to claim 137 or 139 wherein said unchangeable key is not specific to said device.

Claim 155 (New) A method for protecting digital data from illegitimate use, said method comprising:

- determining whether said digital data is subject to be protected or not;
- encrypting said digital data, determined to be protected, using an unchangeable key to produce unchangeable key encrypted digital data;
- storing, copying or transferring said unchangeable key encrypted digital data;
- decrypting said stored, copied or transferred unchangeable key encrypted digital data using said unchangeable key to decrypted digital data; and
- utilizing said stored, copied or transferred unchangeable key encrypted digital data and said decrypted digital data.

Claim 156 (New) The method of claim 155 wherein said unchangeable key may be in a device.

Claim 157 (New) The method according to claim 155, wherein said encrypting and decrypting using said unchangeable key are carried out by a software.

Claim 158 (New) The method according to claim 155, wherein said encrypting and decrypting using said unchangeable key are carried out by a hardware.

Claim 159 (New) The method according to claim 155, in which encrypting and decrypting using said unchangeable key are controlled by identifying information which is added to said digital data.

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Claim 160 (New) The method according to claim 159, in which encrypting and decrypting are carried out when said identifying information is present.

Claim 161 (New) The method according to claim 159, in which encrypting and decrypting are carried out when said identifying information is absent.

Claim 162 (New) The method according to claim 156, wherein said unchangeable key is already placed in said device.

Claim 163 (New) The method according to claim 156, wherein said unchangeable key is generated in said device.

Claim 164 (New) The method according to claim 156, wherein said unchangeable key is supplied externally from said device.

Claim 165 (New) The method according to claim 162, 163 or 164, wherein said unchangeable key is specific to said device.

Claim 166 (New) The method according to claim 162, 163 or 164, wherein said unchangeable key is not specific to said device.

Claim 167 (New) An apparatus for protecting digital data from illegitimate use, said apparatus comprising:

determining means for determining whether said digital data is subject to be protected or not;

means for encrypting said digital data, determined being subject to be protected, using an unchangeable key to produce unchangeable key encrypted digital data;

means for storing, copying or transferring said unchangeable key encrypted digital data;

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means for decrypting said stored, copied or transferred unchangeable key encrypted digital data to said decrypted digital data; and

means for utilizing said stored, copied or transferred unchangeable key encrypted digital data and said decrypted digital data.

Claim 168 (New) The apparatus of claim 167 wherein said unchangeable key may be in a device.

Claim 169 (New) The apparatus according to claim 167, wherein encrypting and decrypting using said unchangeable key are carried out by a software.

Claim 170 (New) The apparatus according to claim 167, wherein encrypting and decrypting using said unchangeable key are carried out by a hardware.

Claim 171 (New) The apparatus according to claim 167, wherein encrypting and decrypting using said unchangeable key are controlled by identifying information which is added to said digital data.

Claim 172 (New) The apparatus according to claim 167, wherein encrypting and decrypting are carried out when said identifying information is present.

Claim 173 (New) The apparatus according to claim 167, wherein encrypting and decrypting are carried out when said identifying information is absent.

Claim 174 (New) The apparatus according to claim 168, wherein said unchangeable key is already placed in said device.

Claim 175 (New) The apparatus according to claim 168, wherein said unchangeable key is generated in said device.

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Claim 176 (New) The apparatus according to claim 168, wherein said unchangeable key is supplied externally from said device.

Claim 177 (New) The apparatus according to claim 174, 175 or 176 wherein said unchangeable key is specific to said device.

Claim 178 (New) The apparatus according to claim 174, 175 or 176 wherein said unchangeable key is not specific to said device.